

DISCUSSION PAPER SERIES

IZA DP No. 12342

**Anti-Elite Politics and Emotional Reactions
to Socio-Economic Problems. Experimental
Evidence on 'Pocketbook Anger' from
France, Germany, and the United States**

Paul Marx

MAY 2019

DISCUSSION PAPER SERIES

IZA DP No. 12342

Anti-Elite Politics and Emotional Reactions to Socio-Economic Problems. Experimental Evidence on 'Pocketbook Anger' from France, Germany, and the United States

Paul Marx

University of Duisburg-Essen, University of Southern Denmark and IZA

MAY 2019

Any opinions expressed in this paper are those of the author(s) and not those of IZA. Research published in this series may include views on policy, but IZA takes no institutional policy positions. The IZA research network is committed to the IZA Guiding Principles of Research Integrity.

The IZA Institute of Labor Economics is an independent economic research institute that conducts research in labor economics and offers evidence-based policy advice on labor market issues. Supported by the Deutsche Post Foundation, IZA runs the world's largest network of economists, whose research aims to provide answers to the global labor market challenges of our time. Our key objective is to build bridges between academic research, policymakers and society.

IZA Discussion Papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available directly from the author.

ISSN: 2365-9793

IZA – Institute of Labor Economics

Schaumburg-Lippe-Straße 5–9
53113 Bonn, Germany

Phone: +49-228-3894-0
Email: publications@iza.org

www.iza.org

ABSTRACT

Anti-Elite Politics and Emotional Reactions to Socio-Economic Problems. Experimental Evidence on ‘Pocketbook Anger’ from France, Germany, and the United States*

Many observers have noticed the importance of anger in contemporary politics, particularly with reference to populism. This article addresses the question under which conditions people become angry about a specific aspect of their lives: their personal financial situation. Specifically, it asks if populist anti-elite rhetoric has a causal influence on anger and if this influence differs across socio-economic groups. The theoretical expectation is that populist rhetoric allows people to externalize responsibility for an unfavorable financial situation and thereby to turn negative self-conscious emotions into anger. The argument is tested with original survey data from France, Germany, and the United States. The empirical analysis yields three main insights. First, negative emotional reactions to respondents’ personal finances (and anger in particular) are surprisingly widespread in all three countries. Second, there is a pronounced socio-economic gradient in anger and other negative emotions. Third, and most importantly, randomly exposing participants to (mildly) populist anti-elite rhetoric causes considerably higher expressed anger about one’s financial situation in France and Germany, but less so in the United States. This suggests a causal role of populist rhetoric in stirring ‘pocketbook anger’. This is true in particular in the middle classes. The notion that populist rhetoric reduces negative self-conscious emotions, such as shame, is not supported by the data.

JEL Classification: D72, D74, P16

Keywords: socio-economic problems, anger, populism, middle class, survey experiments

Corresponding author:

Paul Marx
University of Duisburg-Essen
Institute for Socio-Economics
Lotharstr. 65
47057 Duisburg
Germany
E-mail: paul.marx@uni-due.de

* I gratefully acknowledge very helpful exchanges about this research with Sabina Avdagic, Bert Bakker, Christoph Nguyen, Gijs Schumacher, and Fieke Wagemans. It is part of the research project ‘The influence of socio-economic problems on political integration’ funded by the North Rhine-Westphalian Ministry of Culture and Science.

Introduction

Under which conditions do people become angry about their financial situation? Because feeling anger is intertwined with the motivation to identify and attack a culprit, it can fundamentally change how people connect their pocketbook to politics. Specifically, this article asks whether populist anti-elite rhetoric plays a causal role in stirring ‘pocketbook anger’¹ and, if yes, which socio-economic groups are most susceptible to it.

These questions are important for research into how individual socio-economic problems influence political behavior. The literature on this topic, which has grown tremendously since the Great Recession, is rather fragmented (Margalit 2019). There are largely separate discussions about how people respond to socio-economic problems with pragmatic-materialistic responses (Margalit 2013), withdrawal from politics (Emmenegger et al. 2017), political dissatisfaction (Rooduijn and Burgoon 2018) or out-group hostility (Gidron and Hall 2017).

Which of these political responses prevails under which conditions is a largely unanswered question. An emerging literature suggests, however, that part of the answer lies in peoples’ varying *emotional* responses to socio-economic problems (Aytaç et al. forthcoming; Hochschild 2016; Marx and Nguyen 2018; Pellicer 2018; Salmela and von Scheve 2017; Wagner 2014). Similar situations can be appraised by people in different ways, which leads to different emotions and (political) action tendencies (Marcus et al. 2000; Keltner and Lerner 2010; Lerner et al. 2015; Valentino et al. 2011). Quite generally, the political implications of socio-economic problems should differ fundamentally depending on whether they are mainly associated with, say, fear, shame, envy - or anger. This raises the question under which conditions people are more likely to show one emotional response than another. One source of variation is personality (Bakker et al. 2016). Another factor, emphasized in this article, might be political context. Specifically, it will look at how populist anti-elite rhetoric influences the link between socio-economic problems and negative emotions. Besides being an important phenomenon in contemporary politics, populism is interesting for the present research question, because emotionalized blame attribution is its core element (Busby et al. 2019). Such externalization of blame is precisely what makes the difference between anger and other negative emotions (Harmon-Jones and Harmon-Jones 2016; Keltner and Lerner 2010; Weiner 2006).

In sum, the main hypothesis explored is that populist rhetoric - by constructing elites as a general culprit - invites people to externalize responsibility for their unfavorable financial situation and, hence, to experience anger about it. A second hypothesis is that the populism-attribution-anger nexus functions as a coping mechanism to reduce the more painful negative emotion of shame that results from internalized blame.

¹ Pocketbook anger is a neologism inspired by the concept of ‘pocketbook voting’ in the economic voting literature. I use it as a shorthand for anger about one’s personal economic situation.

Although the primary goal is to contribute to debates about the political behavior implications of socio-economic problems, the article also speaks to an emerging (but somewhat implicit) debate in populism research about whether such parties benefit from or create negative emotions (Hochschild 2016; Magni 2017; Rico et al. 2017; Salmela and von Scheve 2017). My results show that there is a causal flow from populist rhetoric to emotions so that the populism-emotions link should, to the very least, be seen as recursive (Nguyen 2019; Rooduijn et al. 2016).

The empirical evidence is based on a survey experiment conducted in samples (representative of the population between 18 and 65 years) from three countries: France, Germany and the United States. Randomly exposing participants to (mildly) populist anti-elite rhetoric causes considerably higher expressed anger about one's financial situation in France and Germany, but less so in the United States where a populist President is in office. The distribution of anger across socio-economic and political groups differs somewhat between the countries. A consistent finding is, however, that it is not so much the lower classes but rather the middle classes that respond to populist messages with pocketbook anger.

Anti-elite mobilization and pocketbook anger

Emotions are embodied mental processes triggered by a stimulus. This process involves cognitive appraisals along several dimensions (valence, goal relevance, novelty, fairness, agency, intentionality), physiological arousal, and action tendencies. Together these components form a subjectively experienced emotion (Scherer and Moors 2019). Anger is associated with events appraised as undesirable and caused by others. Its intensity should rise with goal relevance (e.g. if self-esteem is involved), perceived unfairness, and intentionality (Hegtveldt and Parris 2014; Weiner 2006). The corresponding action tendency is to approach (e.g. restoration of justice, retribution, holding culprit responsible). Other-blame and approach motivation differentiate anger from negative emotions, in particular shame, that come with internal attribution and withdrawal tendencies (Keltner and Lerner 2010; Harmon-Jones and Harmon-Jones 2016). In line with this reasoning, it has been shown to foster political efficacy and participation and the tendency to punish incumbents (Aytaç et al. forthcoming; Jasper 2018; Marcus et al. 2000; 2017; Valentino et al. 2011; Wagner 2014).

Note that I do not claim causal precedence for cognitive appraisals in general, a claim that would not be in line with neuroscientific evidence on the emotion process (Barrett 2017). But the argument developed below does turn on the idea that political discourses can stir pocketbook anger through a reappraisal of agency, fairness, and intentionality.

Emotional consequences of (lacking) money

Earning a subjectively sufficient amount of money - or not - is an intensely emotional matter. For some people, negative emotions result from existential economic threats, but the main reason in wealthy capitalist societies is that money and the goods it can buy are

status markers and ingredients for social approval (Cohen et al. 2019; Collins 2004; Frank 2007; Marx forthcoming; Turner 2015). Feeling deprived of status is a painful experience (Kemper 2017; Ridgeway 2014; in a literal sense: Eisenberger 2015). If people internalize responsibility for this deprivation, they will experience a mix of negative self-conscious emotions, shame in particular, and tend to withdraw from social and political life (Lewis 2016; Tangney et al. 2007). If people identify an external cause, the experience of status deprivation has all ingredients for intense anger, which motivates action against this cause. This pocketbook anger is not restricted to short episodes but might sediment over time into a 'moral emotion'. In this case, it would be more accurate to speak of righteous anger, indignation, or possibly hate (Jasper 2018: 145-151).

Theoretically, negative emotions are not restricted to the experience of 'objective' poverty. They can also result from frustrated attempts to 'keep up with the Joneses'. Status is relative to milieu-specific reference points (Kemper 2017). Therefore, nothing speaks against pocketbook anger or shame in the middle class (Mols and Jetten 2017).

Political discourses and negative pocketbook emotions

Capitalist societies are often portrayed as benefitting from a 'neoliberal' ideology of self-responsibility. Discourses based on this ideology individualize and moralize economic failure, while they idealize economic success (Boltanski and Chiapello 2005; Sennett 2006). In short, they foster internal attribution and are conducive to shame (Pellicer 2018; Salmela and von Scheve 2017; Walker 2014). The response should be self-deprecation/improvement rather than political action. In electoral research, voters are often seen as reluctant to blame governments for personal economic problems in this culture (Kiewiet and Lewis-Beck 2011; Sniderman and Brody 1977). However, the specific political context might matter.

Socio-economic problems are more likely to become politicized if they are perceived as collective, externally caused, and unfair - appraisals that should be accompanied by (moral) anger (Aytaç et al. forthcoming; Marx 2016; Smith et al. 2008). Several ideologies and discourses aim at constructing such mobilizing appraisals, e.g. socialism. In recent years, populism has been particularly successful. Although it does not always address economic grievances explicitly, a defining feature of populism is the portrayal of social elites as selfish and intentionally harmful to ordinary people (Busby et al. 2019; Hameleers et al. 2017; Mudde and Rovira Kaltwasser 2018). This discourse constructs a generalized externalization of blame, which people can apply to many problems, including their pocketbook. Moreover, socio-economic comparisons are usually at least implied in populist discourses. This can take the form of defending 'hard-working' citizens against free-riders, criticizing redistribution to minorities, addressing the waste of tax money, or sometimes full-blown indignation about economic inequality and globalization (Cramer 2016; Gidron and Hall 2017; Hochschild 2016; Lamont et al. 2017; Müller 2016; Mols and Jetten 2017; Schumacher and van Kersbergen 2016). It thus seems clear that populists try to mobilize voters through stirring anger, including anger about socio-economic outcomes.

Populism and negative emotion: the psychological mechanism

The link between negative emotions and populist appeal is an emerging topic in the literature, but the mechanism is not always clear. One version of the argument is that populists benefit from, express, or channel voters' *pre-existing* anger (Rico et al. 2017). Magni (2017) draws, for instance, a causal chain from the 2008 crisis over attribution and anger to populist voting. Vasilopoulos et al. (forthcoming) show that anger resulting from the 2015 Paris Terror Attacks predicted voting for the radical right. Salmela and von Scheve (2017) argue that socio-economic problems can produce diffuse anger that results from repressed shame and that can be directed by radical right-wing parties at concrete targets. Other contributions put stronger emphasis on political agency. They argue that populist rhetoric *causes* external attribution and anger or that the link between anger and populism is recursive (Busby et al. 2019; Hameleers et al. 2017; Marx and Nguyen 2018; Nguyen 2019; Rooduijn et al. 2016; Wirz et al. 2018). However, anger is rarely used as a dependent variable in these studies.

Commenting on the link between emotions and populism, Jost (2019: 6) has recently called for more attention to 'nonobvious psychological mechanisms—such as denial, projection, repression, and affect displacement'. An example for such a mechanism comes from Hochschild (2016: chapter 15), who contemplates the possibility that populist agency is instrumental in transforming pre-existing negative emotions of depression and shame into more enjoyable collective emotions, including anger. Building on this intuition, I argue that people in capitalist societies, who experience some form of relative socio-economic deprivation, harbor a mix of negative pre-political emotions; some idiosyncratic combination of anxiety, guilt, shame, anger, sadness, and envy. Among these, self-conscious emotions that are associated with internal attributions are the more painful ones and people should be strongly motivated to avoid them (Lewis 2016; Scheff and Retzinger 1991; Tangney et al. 2007). The externalization of blame is the primary way to achieve this (Stuewig et al. 2010; Turner 2015). However, as mentioned above, externalization is to some extent constrained by cultures idealizing meritocracy and self-responsibility. If people in such a situation are exposed to populist discourse, it means that they are offered a cognitive re-appraisal that *plausibly* attributes responsibility to an external cause and that seems to be sanctioned by the support of many fellow citizens. This should be intuitively appealing and cause a shift of the negative emotion mix towards the *least unpleasant* one: anger, particular in its collective form. In the real world, this implies that relatively deprived voters will intuitively select into populist rhetoric. But here I focus on the second implication that *exposure to populist rhetoric increases anger about unfavorable personal financial situations* (Hypothesis 1).

The argument suggests populism-induced anger to serve as a coping mechanism for other negative pocketbook emotions. In fact, coping through re-attribution is well established in the psychological literature. As summarized by Tangney et al. (2007: 352),

'(...) shame and anger go hand in hand. Desperate to escape painful feelings of shame, shamed individuals are apt to turn the tables defensively, externalizing blame and anger outward onto a convenient scapegoat. Blaming others may help individuals regain some sense of control and superiority.'

Following this reasoning, populism-induced anger might serve, to borrow Hochschild's (2016: 226) metaphor, as an 'antidepressant'. This points to the possibility that *exposure to populist rhetoric decreases shame about unfavorable personal financial situations* (Hypothesis 2). This hypothesis comes close to the argument by Salmela and von Scheve (2017) about repressed shame as a basis for populist mobilization. The main difference is that in their argument, coping with shame occurs prior to discourse exposure, whereas I emphasize in addition populism's direct causal role in shame coping (see Marx & Nguyen 2018 and Spruyt et al. 2016 for related arguments and Jasper 2018 for an overview of analogous strategies in social movements).

Who becomes angry?

So far, socio-economic problems and deprivation were described in deliberately generic terms. Indeed, the argument can be applied for many different subjective problems, as long as the content of a political discourse allows *plausible* externalization of responsibility. Populism often denies this to the poorest in society. Particularly if they belong to minorities or do not work, they actually become scapegoats in some populist narratives (Lamont et al. 2017; Mols and Jetten 2017; Schumacher and van Kersbergen 2016). External attribution and anger could actually be easier to instill in members of the (lower) middle class who belong to the ethnic majority, because it is easier for them to identify with populists' stylized 'people'. And although it is difficult to identify a typical populist electorate across countries (Rooduijn 2018; Stockemer et al. 2018), it is often argued that populist parties have electoral strongholds in the lower middle class rather than the absolute bottom of the income distribution (Golder 2016).

While the default amount of negative pocketbook emotions should decline with income, the middle class should be by no means immune. Research on positional consumption suggests that income inequality and ensuing status competition are considerable stressors for middle class families (Frank 2007; Winkelmann 2012). Relatedly, it has been argued that negative emotional reactions are particularly intense if relatively high but precarious socio-economic status becomes threatened (Mols and Jetten 2017).

Beyond these considerations, the present article refrains from making a general argument about whether people in the lower or middle classes are more prone to respond to populist rhetoric with anger. Existing research offers little guidance on this question and it likely depends on the social and political context. Consequently, an inductive approach is adopted for this aspect.

Survey experiment on populism and pocketbook emotions

Hypothesis 1 and 2 are tested in a survey experiment conducted in November and December 2018 in three countries. For each country, about 1500 participants aged 18 to 65 years were sampled from YouGov's online panel. YouGov claims representativeness, but common sense and research in survey methodology (Couper 2017; MacInnis et al. 2018) cast doubt on this claim. It is reasonable to expect that opt-in recruitment compared to random sampling introduces bias in unobserved characteristics. Moreover, it is hard to assess how habitually answering surveys for financial rewards influences engagement, particularly with complex or tiring items. That said, for experimental research such panels provide an affordable compromise of internal and external validity that allows at least a tentative generalization of the findings. For the present purpose, they moreover provide the indispensable variation in socio-economic background.

Case selection and contexts

The experiment was conducted simultaneously in France, Germany, and the US. The goal of including several countries is not to isolate the effect of a specific variable, but to provide some background variation within the universe of advanced capitalist democracies. This anticipates unclear replicability as a frequent criticism of experimental research (Sniderman 2018) and might form the basis for comparative hypotheses.

The three countries differ on a number of dimensions. They include, for instance, a presidential, semi-presidential and parliamentary democracy, two- and multi-party systems, liberal and coordinated market economies, advanced and residual welfare states, and different degrees of economic inequality. Also the particular form and intensity of populist politics differs. Appendix A provides some details on these differences. In short, France is a case with a relatively long tradition of populist parties both on the political left and right. Populism's influence in French society was illustrated by the strong showing of populist candidates in the 2017 Presidential Election and the violent *gilets jaunes* protests that erupted during the data collection in November 2018. Populism is weaker in Germany where only the 2015 'refugee crisis' led to the emergence of a radical right-wing party on the national level and where left-wing populism is not strongly developed. The US is the only case with a populist government. Although its electoral system usually keeps populist challengers out, the US has a long history of populist rhetoric inside the main parties, from third candidates, and in the media.

Experimental design

The experimental design closely follows Marx and Nguyen (2018). As in their study, the goal is to activate populist anti-elite rhetoric. This is done by randomly exposing half of the sample (prior to emotion measurement) to three survey items, for which they can indicate their (dis)agreement on Likert scales from one to five. The statements are:

'Politicians often lie to get elected'.

'Politicians are mainly interested in their careers and not in the good of the country'.

'The politicians in [Paris/Berlin/Washington] have abandoned ordinary people'.

These statements reflect the typical anti-elite component of populist rhetoric, but are far from extreme versions of this criticism. The goal is to mentally activate a 'populist lens' on one's pocketbook that, according to Hypothesis 1, should elicit anger. The statements deliberately do not include direct references to specific ideologies or socio-economic problems. While the latter would arguably make treatment effects more likely, the chosen formulation allows assessing if participants translate general populist attributions into appraisals of their pocketbook situation.

A weakness of the design should be acknowledged. This way of mentally activating populism as an interpretative frame obviously draws on real-world experiences that experimental and control group share. The control group is therefore 'contaminated' with exposure to populist discourse whose duration and intensity depends on the country (Appendix A). The statements will hardly provide a surprising or new framework for thinking about politics, so that any treatment effect should be interpreted as resulting from variation in situational salience of populism. While this is unfortunate, it is hard to avoid in research on relevant real-world phenomena. Moreover, it should raise the possibility of bottom and ceiling effects and hence stack the cards against significant treatment effects.

Measuring emotions

The primary dependent variable is anger (Hypothesis 1), complemented with shame (Hypothesis 2). Following widespread practice, emotions are measured through self-reports based on emotion words. As advocated by Marcus et al. (2017), participants are asked to move sliders on scales between low ('Not at all...') and high intensity ('Extremely...') of the respective emotion (from zero to hundred). The instructions read as follows:

'We would like to ask you to take a moment and think about your personal financial situation. What we mean by that is how difficult or easy you find it to make ends meet with your budget and to afford the things you want. If you think about your personal financial situation: how does that make you feel? Please choose the location that shows how you feel. You can afterwards move the slider to the left or the right to change the location.'

Note that nothing in the formulation indicates a link to politics. Moreover, the wording has a 'bottom-up' character because rather than specifying particular socio-economic problems or benchmarks, it leaves it entirely to respondents what standards they use to assess their financial situation. While 'making ends meet' probably has a connotation of more existential problems, an inability to 'afford things you want' could apply to just anybody.

The emotion words are chosen from the modified Differential Emotions Scale (mDES; Fredrickson 2013) and translated into French and German. To avoid overwhelming respondents and out of costs considerations, the number of emotion items is restricted to ten. The emotions that are central to the hypotheses, anger and shame, are measured with three items. In addition, to account for the possibility that other negative emotions are involved, sadness and fear are measured with two items.

A comment is necessary on shame measurement, which is not straightforward. The main reason is that expressing shame is stigmatized and, hence, shameful itself. As Scheff and Retzinger (1991) show, people therefore usually use indirect verbal markers to express it. Against this background, mDES shame words ('ashamed', 'humiliated', 'disgraced') are not perfect for the present context. Few people would arguably use such strong language to describe financial situations. 'Humiliated' and 'disgraced' are therefore replaced with 'embarrassed' and 'dissatisfied with myself'. The former technically is a different emotion (Lewis 2016), however, with fuzzy boundaries in colloquial speech. The latter is a verbal marker that seems appropriate to express milder forms of pocketbook-induced shame.

Table 1. Emotions labels by country and domain with Cronbach's α

	Anger	Shame	Sadness	Fear
FR	furieux(-se), irrité(e), en colère ($\alpha= 0.94$)	mécontent(e) de moi, honteux(-se), embarrassé(e) ($\alpha= 0.79$)	triste, découragé(e) ($\alpha= 0.88$)	anxieux(-se), craintif(-ve) ($\alpha= 0.86$)
DE	wütend, verärgert, zornig ($\alpha= 0.95$)	unzufrieden mit mir, verschämt, verlegen ($\alpha= 0.86$)	traurig, entmutigt ($\alpha= 0.92$)	ängstlich, furchtsam ($\alpha= 0.84$)
USA	angry, irritated, annoyed ($\alpha= 0.94$)	dissatisfied with myself, ashamed, embarrassed ($\alpha= 0.91$)	sad, downhearted ($\alpha= 0.94$)	fearful, afraid ($\alpha= 0.92$)

All emotion domains have satisfactory Cronbach's alphas in each of the countries, so that the respective arithmetic mean is used in the analyses. However, it has to be acknowledged that the method did not work well in *differentiating between* negative emotions. The correlations of anger with the other negative emotions is high in each of the three countries, ranging between 0.65 and 0.86. Moreover, exploratory factor analyses (not shown) yield one-factor solutions in each of the countries. This issue, to which I will return in the final discussion, is a problem in particular for Hypothesis 2 which turns on the notion that anti-elite rhetoric can change the negative emotion mix.

Operationalizations of socio-economic groups

The hypotheses refer to *unfavorable* personal financial situations. By implication, treatment effects should be moderated by respondents' financial situation. The analyses rely on natural variation in socio-economic position, which, to assess robustness, is

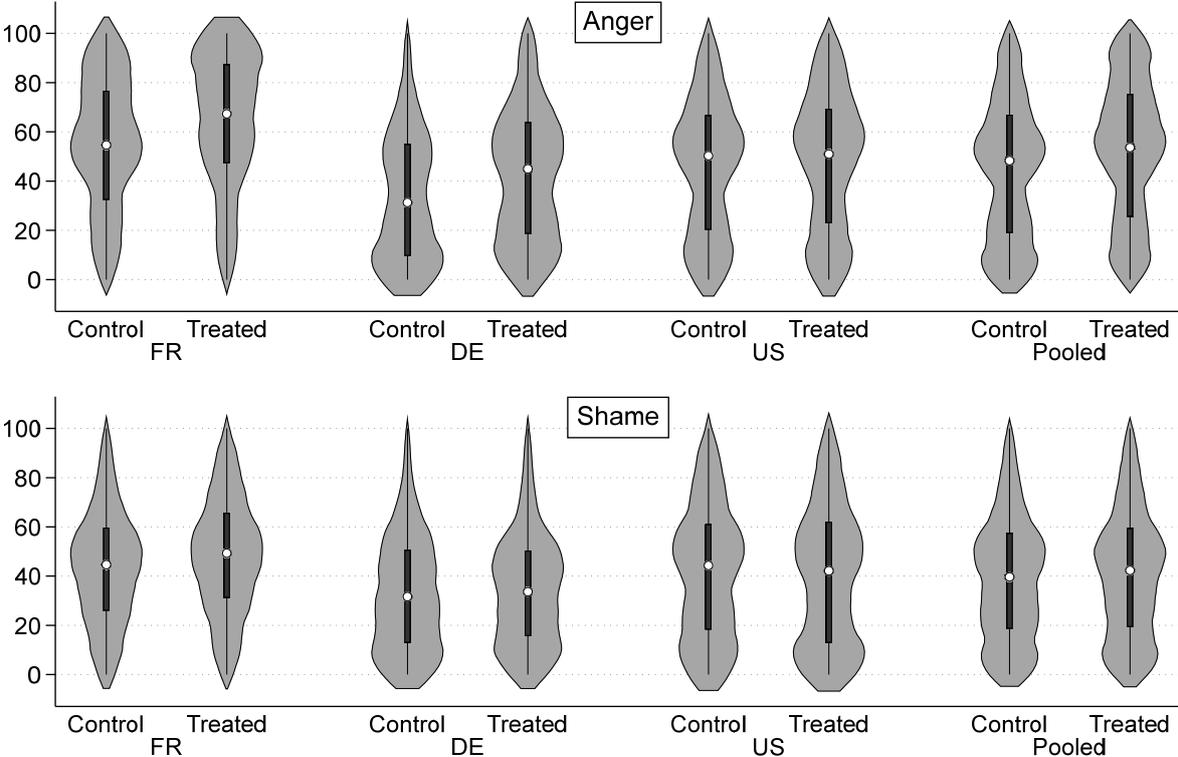
operationalized in a number of ways. First, to capture its subjective dimension, a question is borrowed from the European Social Survey: ‘Which of the following statements comes closest to how you feel about your household’s income nowadays?’. The four answer options are ‘Living comfortably on present income’, ‘Coping on present income’, ‘Finding it difficult on present income’, and ‘Finding it very difficult on present income’.

Second, as an objective measure, household income is included by a) deriving a pseudo-linear income variable by assigning the midpoint to YouGov’s country-specific income bands; b) dividing this variable by top-coded household size (as a crude equivalence scale) and c) dividing the samples in quintiles.

Third, as a global assessment of socio-economic position, people are asked a typical ‘social-ladder’ question: ‘There are people who tend to be towards the top of our society and people who tend to be towards the bottom. Where would you place yourself on the following scale nowadays?’. Possible answers range from one (‘Bottom of our society’) to ten (‘Top of our society’). Because the goal is to study effects of distinct positions in the class hierarchy, rather than linear effects of status, the variable is broken down into five categories, each comprising two scale points.

While all these operationalizations have blind spots if applied in isolation, together they should go a long way in capturing relevant aspects of socio-economic positions in post-industrial societies.

Figure 1. Distribution of anger and shame by country and experimental condition



Note: Grey: kernel density, white dot: median; thick line: interquartile range, thin line: upper to lower adjacent values.

Mean differences in negative pocketbook emotions

Figure 1 presents violin plots of the distributions of anger and shame across countries and experimental conditions. Eyeballing these distributions immediately suggests strong treatment effects in France and Germany. In France, the proportion of very angry respondents grows considerably after receiving the populism treatment. In Germany, there is a decline of respondents with very low anger and a clear growth of respondents with high or very high anger (although from a much lower level compared to France). Difference for anger in the US and for shame in all three countries appear modest or non-existent.

T-tests between the means in control (M_c) and treatment group (M_t) confirm these impressions. In the pooled sample, anger is significantly lower ($p < 0.001$) in the control group ($M_c = 45.1$, $SD_c = 29.1$) than in the treatment group ($M_t = 51.8$, $SD_t = 29.7$). The mean difference $M_t - M_c$ is 9.3 in France and 8.7 in Germany (both significant with $p < 0.001$), which are meaningful effect sizes. In the US, this difference is only 1.9 and not significant. For shame, there is a significant ($p = 0.022$) but small difference in the pooled sample between control ($M_c = 39.9$, $SD_c = 25.8$) and treatment group ($M_t = 41.7$, $SD_t = 26.5$). The effect seems to be entirely driven by France ($M_t - M_c = 4.0$, $p = 0.002$) and is neither significant in Germany, nor in the US.

In passing, it is also worth looking at the other two emotions. In France, sadness ($M_t - M_c = 7.0$, $p < 0.001$) and fear ($M_t - M_c = 7.1$, $p < 0.001$) show significant effects, but with a smaller magnitude than for anger. In Germany, there is a significant effect only for sadness ($M_t - M_c = 4.2$, $p = 0.003$). In the US, neither variable shows a significant difference.

In sum, the treatment seems to be effective in generating negative pocketbook emotions in France and Germany, but not in the United States. The patterns lend some initial support to Hypothesis 1. Hypothesis 2, however, does not perform well on this level of analysis. The conjectured negative effect could not be observed in any country.

Treatment effects by socio-economic group

A more meaningful test of Hypotheses 1 and 2 is to assess treatment effects across socio-economic groups. Figure 2 shows predictions of anger levels by experimental condition in these groups (based on regressions of anger on the treatment indicator, the respective categorical group variable, and their interaction). The marginal effects of the treatment variable by group category are summarized in Table B1 in the appendix.

A first observation is that for all countries and variables, there is a clear socio-economic gradient. Unsurprisingly, the gradient is less clear for income quintiles, which is a rather crude measure and, compared to the subjective indicators, further away in the causal chain producing pocketbook anger. The fact that pocketbook anger does show the expected distribution should increase trust in the variable. Moreover, I would argue that the magnitude of the differences is important descriptive information in its own right. It suggests that citizens with unfavorable socio-economic positions experience considerable anger (and probably tend to externalize blame), even in the control group. Again, it might

be possible that exposure to populism outside the experiment has contributed to this (which would lead to an underestimation of populism effects in the experiment).

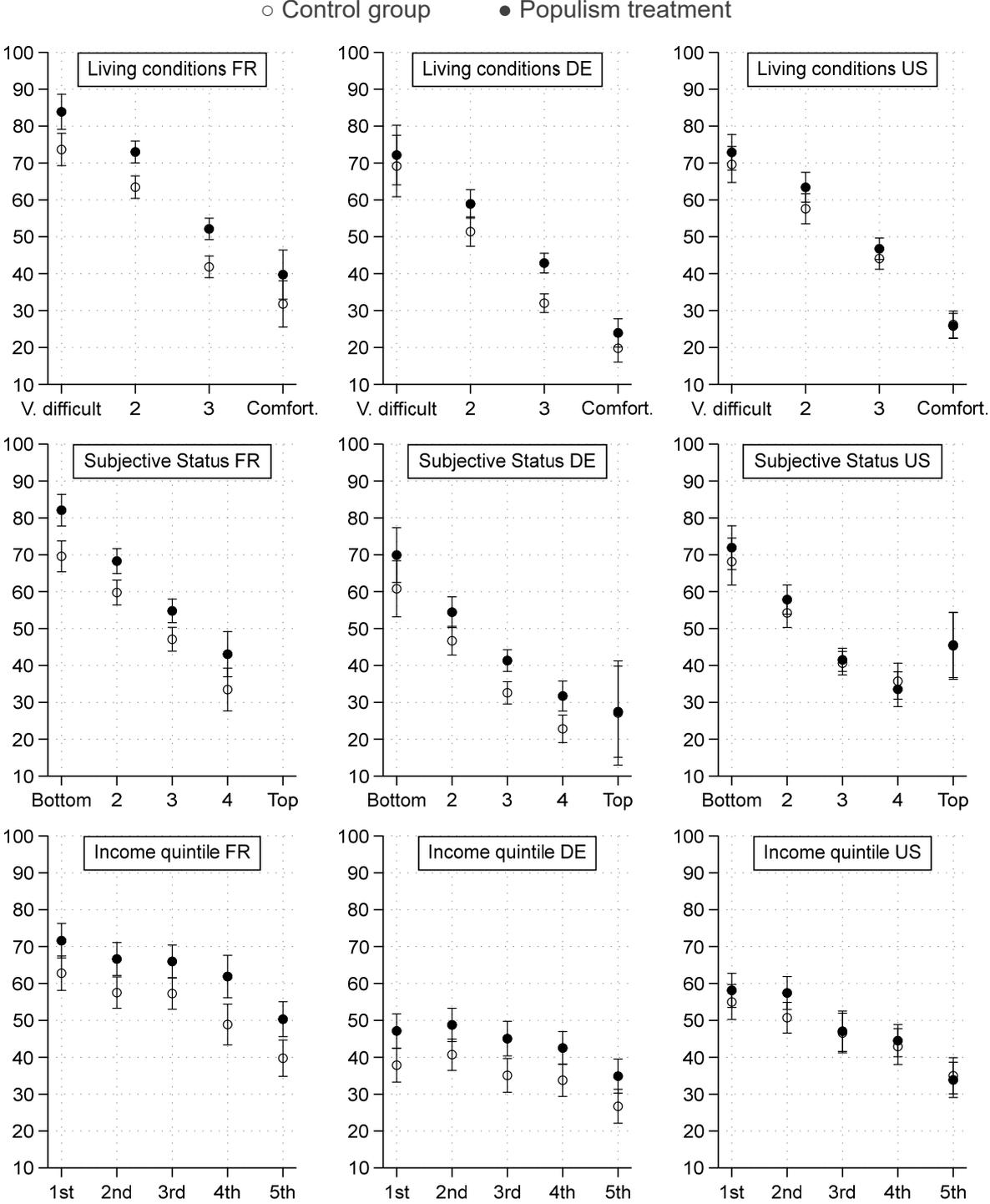
Turning to treatment effects by socio-economic group, there are some differences across contexts. Generally, treatment effects do not decrease linearly with socio-economic position. In France, the treatment effects are actually rather homogenous. The only exceptions are high subjective positions (interestingly, French participants were reluctant to place themselves in the two highest status categories; they only comprised nine cases and had to be dropped from the analysis). Hence, it seems that the item measuring pocketbook emotions is flexible enough to capture the probably quite different sources of anger in the middle and the lower classes. In this context, it should be borne in mind that populism in France is spread across the political spectrum (Appendix A). This means that it could be easier to link the generic anti-elite rhetoric used in the experiment to different economic grievances, such as poverty or excessive taxation. In Germany, treatment effects are only significant in the middle segments on the subjective scales and homogenous across income quintiles. Hence, in Germany it seems to be predominantly the middle class that responds with pocketbook anger to anti-elite rhetoric. The same is true for the US, but in a narrower and less consistent way. Here, we only observe a moderate treatment effect among respondents in the second lowest category of subjective living conditions ('Difficult') and in the second lowest income decile. Hence, in the US it is only the lower middle class that shows some anger response.

In sum, as was to be expected, there are some country differences in the socio-economic profile of respondents susceptible to pocketbook anger. The consistent finding across countries is that the lower middle class expresses more anger after having been exposed to populist rhetoric (with significant effects in eight out of nine models).

The equivalent of Figure 2 for shame as a dependent variable is shown in the appendix (Figure B1). Taken together, there is no support for Hypothesis 2 in it. There are only few significant effects and among those few, most are clearly smaller in size than effects for anger. In fact, there is only one significant effect in the expected (negative) direction.

As a robustness check, Table B1 in the appendix compares marginal effects with and without control variables. This is relevant because the moderators are non-experimental and could capture unobserved heterogeneity. To reduce such potential bias, additional models control for age (square), dummies for gender, university, degree, and employment, self-placement on the left-right scale, political interest, residence in cities, and country-specific region dummies. As can be seen from Table B1, the marginal effects do not differ meaningfully across models with and without control variables.

Figure 2. Average pocketbook anger by country, socio-economic group and experimental condition with 95% confidence intervals



Note: Category ‘Top’ in ‘Subjective status FR’ dropped because of low cases numbers (n=9).

Finally, one might ask if the socio-economic categories emphasized in this article are the only relevant moderators. Figure B2 in the appendix presents treatment effects on pocketbook anger by political leaning (left-right scale and party preferences). It shows that there are indeed important differences. A result that stands out is that in Germany,

voters of the right-wing populist *Alternative für Deutschland* (AfD) are extremely susceptible to the anti-elite frame. They show a highly significant treatment effect of around 17 (voting for 'Other' parties and having a right-wing ideology have equally large effects in Germany). At the same time, AfD voters' bottom line anger is much lower than among French voters of *Rassemblement National* (who show a smaller but still significant treatment effect of around 10). A reason could be that German voters have not (yet) internalized to the same extent the still fairly recent anti-elite rhetoric of the radical right.

Discussion

Overall, the analyses support Hypothesis 1. Anti-elite rhetoric in many cases has a causal influence on pocketbook anger. Regarding the research question of *who* becomes angry, there was rather consistent evidence for anger susceptibility in the (lower) middle classes. This fits into narratives of a 'shrinking', 'anxious', or 'squeezed' middle (e.g. Mols and Jetten 2017). But it should also be borne in mind that respondents at the bottom of the distribution already expressed strong anger in the control group, a phenomenon that deserves attention in future research.

A caveat in the present analyses was the strong correlation between negative emotions that are conceptually distinct. It might be that this relates to a weakness of measuring emotions with verbal markers whose meaning depends on the context (e.g. we sometimes say how sad something is to express anger). It could also be specific to the present topic of socio-economic status. Respondents might find it difficult (or might not be sufficiently motivated) to differentiate their complex pocketbook-related emotions in the context of a survey. The choice only to include negative emotions might have facilitated an undifferentiated response pattern even further. Interestingly, Aytac et al. (forthcoming) in a related study made a similar observation when their blame treatment simultaneously (and counter-intuitively) triggered anger *and* guilt among the unemployed (see their footnote 7). Generally, more research on negative pocketbook emotions is necessary. For this analysis, the strong correlations might raise concerns about whether anger really captured negative valence. However, as shown above, for anger there were considerably stronger and more consistent effects than for any other negative emotion. This suggests that the results are, to some extent, unique for anger.

As was to be expected, treatment effects on pocketbook anger differed across countries. It is tempting to interpret these differences in light of the countries' variants of real-world populism, but there certainly are many factors at play. In France, where the data collection coincided with populist yellow-vest riots, where mainstream parties imploded in the 2017 elections and where populist mobilization is spread across the left-right continuum, treatment effects could be observed in most socio-economic groups. Again, it seems plausible that in this context respondents were relatively free to project a diverse array of economic problems on the abstract anti-elite attribution. In Germany, populism's arrival at the core of the party system is more recent and is mostly associated with the radical right. This could contribute to a context where it is easier for the middle class than for the most disadvantaged citizens to use anti-elitism as a re-attribution device.

The US was the case with the weakest treatment effects. It is not unreasonable to speculate that this might have something to do with the populist presidency at the time of the survey. First, populists in power could simply weaken the treatment, because respondents get confused about whom exactly the label 'Politicians in Washington' refer to. Second, the process of re-attribution gets complicated, because even supporters of populism have to ask themselves to what extent the 'establishment' or the current populist government should be blamed. Third, populist discourses might lose their quality as empty signifiers if they are associated with policy approaches, such as tax cuts for the wealthy or protectionism for specific industries. Fourth, populist rhetoric might be so prevalent in political discourses that respondents show weaker responses to it than elsewhere. To verify these speculations, we would have to know more about emotion and attribution dynamics among supporters of populists who move into office.

Finally, the non-finding for shame merits discussion. As already explained in the beginning, shame is not easy to measure. This is certainly true for the type of shame the present argument emphasizes: the largely unconscious self-degradation through accepting economic failure as one's own fault. It might be that the used shame measurement of simply asking people about it is too naïve. Of course, it might very well be that the argument about populism as shame coping is flawed. However, given the methodological limitations of the present paper, alternative (and probably more indirect) measures should be applied before dismissing it. This is even more so as the high baseline levels of anger could be interpreted as suggestive evidence that some shame repression along the theorized lines has taken place already in real-world politics.

Conclusions

This article has three messages that future research on the micro-political implications of socio-economic problems should take into account. First, people's pocketbook is a deeply emotional matter. Far into the middle classes, many respondents in this survey attached intense negative emotions to their financial situations. Given what we know from the (political) psychology of emotions, this can have profound moderating effects on their *behavior*. Anger might be precisely what makes the difference between mobilizing and demobilizing tendencies resulting from socio-economic problems (Aytaç et al. forthcoming). This does not necessarily mean that people become disinterested in calculating material benefits, but it suggests that such cognitive factors have to compete with powerful affective influences. Second, the findings suggest that discursive contexts can influence the political meaning of socio-economic problems. Studying the interplay of discourse, emotion, attribution, and political behavior certainly is a relevant avenue for research in this area. Populism arguably is only one example for a discourse that matters in this regard. And even for populism, this article has only started to tease apart the mechanisms through which it influences the emotional dynamic of personal finances. Third, we should not treat socio-economic position as a linear construct and assume that people in the absolute bottom are the most politically alienated. Rather, this research reinforces worries about the political integration of the middle classes in advanced capitalist

societies. Of course, pocketbook anger does not amount to political alienation and its behavioral manifestations still have to be established. However, it does seem plausible that the responsiveness to the treatment in this study does indicate considerable economic frustration paired with a willingness to blame politicians for it. How the middle class links current and anticipated economic grievances to politics is a critical question – scientifically and socially.

Finally, the presented findings bear relevance for populism research as well. Mudde and Rovira Kaltwasser (2018) have recently argued that debates about socio-economic determinants of populist appeal have reached an impasse. This is arguably the consequence of overly structuralist or simply vague conceptions of socio-economic factors (as illustrated by the losers-of-globalization debate). Departing from the psychological functions of jobs, money, and consumption might be a way out. If we take peoples' subjectivity seriously, we are forced to acknowledge that material rewards have no motivational force per se. Rather, they are linked to behaviors through complex and dynamic emotion processes. We are only beginning to understand how populists can benefit from *and* shape these processes.

References

- Aytaç, S. E., Rau, E. G., & Stokes, S. (forthcoming). Beyond Opportunity Costs: Campaign Messages, Anger and Turnout among the Unemployed. *British Journal of Political Science*.
- Bakker, B. N., Rooduijn, M., & Schumacher, G. (2016). The psychological roots of populist voting: Evidence from the United States, the Netherlands and Germany. *European Journal of Political Research*, 55(2), 302-320.
- Barrett, L. F. (2017). The theory of constructed emotion: an active inference account of interoception and categorization. *Social Cognitive Affective Neuroscience*, 12(1), 1-23.
- Boltanski, L., & Chiapello, E. (2005). *The new spirit of capitalism*. London; New York: Verso.
- Busby, E. C., Gubler, J. R., & Hawkins, K. A. (2019). Framing and Blame Attribution in Populist Rhetoric. *Journal of Politics*, 81(2), 616-630.
- Cohen, D., Shin, F., & Liu, X. (2019). Meanings and Functions of Money in Different Cultural Milieus. *Annual Review of Psychology*, 70(1), 475-497.
- Collins, R. (2004). *Interaction ritual chains*. Princeton: Princeton University Press.
- Couper, M. P. (2017). New developments in survey data collection. *Annual Review of Sociology*, 43(1), 121-145.
- Cramer, K. J. (2016). *The politics of resentment: Rural consciousness in Wisconsin and the rise of Scott Walker*. Chicago: University of Chicago Press.
- Eisenberger, N. I. (2015). Social pain and the brain: controversies, questions, and where to go from here. *Annual Review of Psychology*, 66(1), 601-629.

- Emmenegger, P., Marx, P., & Schraff, D. (2017). Off to a bad start: Unemployment and political interest during early adulthood. *Journal of Politics*, 79(1), 315-328.
- Frank, R. H. (2007). *Falling Behind: How Income Inequality Harms the Middle Class*. Oakland: University of California Press.
- Fredrickson, B. L. (2013). Positive emotions broaden and build. In P. Devine & A. Plant (Eds.), *Advances in Experimental Social Psychology* (Vol. 47, pp. 1-53). Burlington: Academic Press.
- Gidron, N., & Hall, P. A. (2017). The politics of social status: Economic and cultural roots of the populist right. *British Journal of Sociology*, 68(S1), S57-S84.
- Golder, M. (2016). Far right parties in Europe. *Annual Review of Political Science*, 19(1), 477-497.
- Hameleers, M., Bos, L., & de Vreese, C. H. (2017). "They did it": The effects of emotionalized blame attribution in populist communication. *Communication Research*, 44(6), 870-900.
- Harmon-Jones, E., & Harmon-Jones, C. (2016). Anger. In L. F. Barrett, M. Lewis & J. M. Haviland-Jones (Eds.), *Handbook of Emotions* (4 ed., pp. 774-791). New York; London: Guilford Press.
- Hegtvedt, K. A., & Parris, C. L. (2014). Emotions in justice processes. In J. E. Stets & J. H. Turner (Eds.), *Handbook of the Sociology of Emotions: Volume II* (pp. 103-125). New York: Springer.
- Hochschild, A. R. (2016). *Strangers in their own land: Anger and mourning on the American right*. New York; London: The New Press.
- Jasper, J. M. (2018). *The emotions of protest*. Chicago: University of Chicago Press.
- Jost, J. T. (forthcoming). Anger and Authoritarianism Mediate the Effects of Fear on Support for the Far Right—What Vasilopoulos et al. (2019) Really Found. *Political Psychology*.
- Keltner, D., & Lerner, J. S. (2010). Emotion. In S. T. Fiske, D. T. Gilbert & L. Gardner (Eds.), *Handbook of Social Psychology. Volume Two* (5 ed., pp. 317-352). Hoboken: Wiley & Sons.
- Kemper Theodore, D. (2017). *Elementary forms of social relations: Status, power and reference groups*. Abingdon; New York: Routledge.
- Kiewiet, D. R., & Lewis-Beck, M. S. (2011). No man is an island: self-interest, the public interest, and sociotropic voting. *Critical Review*, 23(3), 303-319.
- Lamont, M., Park, B. Y., & Ayala-Hurtado, E. (2017). Trump's electoral speeches and his appeal to the American white working class. *British Journal of Sociology*, 68(S1), S153-S180.
- Lerner, J. S., Li, Y., Valdesolo, P., & Kassam, K. S. (2015). Emotion and decision making. *Annual Review of Psychology*, 66(1), 799-823.

- Lewis, M. (2016). Self-conscious emotions: Embarrassment, Pride, Shame, Guilt, and Hubris. In L. F. Barrett, M. Lewis & J. M. Haviland-Jones (Eds.), *Handbook of Emotions* (4 ed., pp. 792-814). New York; London: Guilford Press.
- MacInnis, B., Krosnick, J. A., S Ho, A., & Cho, M.-J. (2018). The Accuracy of Measurements with Probability and Nonprobability Survey Samples. Replication and Extension. *Public Opinion Quarterly*, 82(4), 707–744.
- Magni, G. (2017). It's the emotions, Stupid! Anger about the economic crisis, low political efficacy, and support for populist parties. *Electoral Studies*, 50(1), 91-102.
- Marcus, G. E., Neuman, W. R., & MacKuen, M. (2000). *Affective intelligence and political judgment*. Chicago: University of Chicago Press.
- Marcus, G. E., Neuman, W. R., & MacKuen, M. B. (2017). Measuring Emotional Response: Comparing Alternative Approaches to Measurement. *Political Science Research Methods*, 5(4), 733-754.
- Margalit, Y. (2013). Explaining Social Policy Preferences: Evidence from the Great Recession. *American Political Science Review*, 107(1), 80-103.
- Margalit, Y. (2019). Political Responses to Economic Shocks. *Annual Review of Political Science*, 22(1), forthcoming.
- Marx, P. (forthcoming). Should we study political behaviour as rituals? Towards a general micro theory of politics in everyday life. *Rationality and Society*.
- Marx, P. (2016). The insider-outsider divide and economic voting: Testing a new theory with German electoral data. *Socio-Economic Review*, 14(1), 97-118.
- Marx, P., & Nguyen, C. (2018). Anti-elite parties and political inequality: How challenges to the political mainstream reduce income gaps in internal efficacy. *European Journal of Political Research*, 57(4), 919-940.
- Mols, F., & Jetten, J. (2017). *The wealth paradox: Economic prosperity and the hardening of attitudes*. Cambridge: Cambridge University Press.
- Mudde, C., & Rovira Kaltwasser, C. (2018). Studying populism in comparative perspective: Reflections on the contemporary and future research agenda. *Comparative Political Studies*, 51(13), 1667-1693.
- Müller, J.-W. (2016). *What Is populism?* Philadelphia: University of Pennsylvania Press.
- Nguyen, C. G. (2019). Emotions and Populist Support. <https://doi.org/10.31235/osf.io/e2wm6>.
- Pellicer, M. (2018). Coping and the political behavior of low socio-economic status individuals, *SPIRe Working Paper*, WP03.
- Rico, G., Guinjoan, M., & Anduiza, E. (2017). The emotional underpinnings of populism: how anger and fear affect populist attitudes. *Swiss Political Science Review*, 23(4), 444-461.

- Ridgeway, C. L. (2014). Why status matters for inequality. *American Sociological Review*, 79(1), 1-16.
- Rooduijn, M. (2018). What unites the voter bases of populist parties? Comparing the electorates of 15 populist parties. *European Political Science Review*, 10(3), 351-368.
- Rooduijn, M., & Burgoon, B. (2018). The Paradox of Well-being: Do Unfavorable Socioeconomic and Sociocultural Contexts Deepen or Dampen Radical Left and Right Voting Among the Less Well-Off? *Comparative Political Studies*, 51(13), 1720-1753.
- Rooduijn, M., van der Brug, W., & de Lange, S. L. (2016). Expressing or fuelling discontent? The relationship between populist voting and political discontent. *Electoral Studies*, 43(1), 32-40.
- Salmela, M., & von Scheve, C. (2017). Emotional roots of right-wing political populism. *Social Science Information*, 56(4), 567-595.
- Scheff, T. J., & Retzinger, S. M. (1991). *Emotions and violence: Shame and rage in destructive conflicts*. New York: Lexington.
- Scherer, K. R., & Moors, A. (2019). The Emotion Process: Event Appraisal and Component Differentiation. *Annual Review of Psychology*, 70(1), 719-745.
- Schumacher, G., & van Kersbergen, K. (2016). Do mainstream parties adapt to the welfare chauvinism of populist parties? *Party Politics*, 22(3), 300-312.
- Sennett, R. (2006). *The culture of the new capitalism*. New Haven; London: Yale University Press.
- Smith, H. J., Cronin, T., & Kessler, T. (2008). Anger, fear, or sadness: Faculty members' emotional reactions to collective pay disadvantage. *Political Psychology*, 29(2), 221-246.
- Sniderman, P. M. (2018). Some Advances in the Design of Survey Experiments. *Annual Review of Political Science*, 21(1), 259-275.
- Sniderman, P. M., & Brody, R. A. (1977). Coping: The ethic of self-reliance. *American Journal of Political Science*, 21(3), 501-521.
- Spruyt, B., Keppens, G., & Van Droogenbroeck, F. (2016). Who supports populism and what attracts people to it? *Political Research Quarterly*, 69(2), 335-346.
- Stockemer, D., Lentz, T., & Mayer, D. (2018). Individual Predictors of the Radical Right-Wing Vote in Europe: A Meta-Analysis of Articles in Peer-Reviewed Journals (1995–2016). *Government and Opposition*, 53(3), 569-593.
- Stuewig, J., Tangney, J. P., Heigel, C., Harty, L., & McCloskey, L. (2010). Shaming, blaming, and maiming: Functional links among the moral emotions, externalization of blame, and aggression. *Journal of Research in Personality*, 44(1), 91-102.
- Tangney, J. P., Stuewig, J., & Mashek, D. J. (2007). Moral emotions and moral behavior. *Annual Review of Psychology*, 58, 345-372.

- Turner, J. H. (2015). *Revolt from the middle: Emotional stratification and change in post-industrial societies*. London; New York: Routledge.
- Valentino, N. A., Brader, T., Groenendyk, E. W., Gregorowicz, K., & Hutchings, V. L. (2011). Election night's alright for fighting: The role of emotions in political participation. *Journal of Politics*, 73(1), 156-170.
- Vasilopoulos, P., Marcus, G. E., Valentino, N. A., & Foucault, M. (forthcoming). Fear, anger, and voting for the far right: Evidence from the November 13, 2015 Paris terror attacks. *Political Psychology*.
- Wagner, M. (2014). Fear and anger in Great Britain: Blame assignment and emotional reactions to the financial crisis. *Political Behavior*, 36(3), 683-703.
- Walker, R. (2014). *The shame of poverty*. Oxford: Oxford University Press.
- Weiner, B. (2006). *Social motivation, justice, and the moral emotions: An attributional approach*. New York: Psychology Press.
- Winkelmann, R. (2012). Conspicuous consumption and satisfaction. *Journal of Economic Psychology*, 33(1), 183-191.
- Wirz, D. S., Wettstein, M., Schulz, A., Müller, P., Schemer, C., Ernst, N., et al. (2018). The Effects of Right-Wing Populist Communication on Emotions and Cognitions toward Immigrants. *International Journal of Press/Politics*, 23(4), 496-516.

Appendix A: Populism in France, Germany, and the United States

The French *Rassemblement National* (RN, previously *Front National*) is one of the earlier and in many ways paradigmatic cases of contemporary right-wing populism in Western Europe (Mayer 2018). Because of France's majoritarian electoral system, RN's vote shares probably underestimate its political potential – which was demonstrated by reaching twice the run-off for the presidential election (in 2002 and 2017). In addition, left-wing populism traditionally plays a strong role in France, for a long time through the *Parti Communiste Français*. Its demise in the past decades made room for various radical left parties that is currently occupied by *La France Insoumise* (LFI) under the leadership of Jean-Luc Mélenchon (who reached almost 20 percent of the votes in the first round of the 2017 presidential election). LFI and Mélenchon combine a strong anti-elite stance (against financial oligarchy in collusion with political parties) with radical opposition to globalization, austerity, inequality, and European integration (Ivaldi 2019). Counting in candidates from smaller parties, about 45 percent of the votes in the first round of the 2017 election went to populists, while mainstream parties experienced an unprecedented implosion (ibid.). In sum, French populism in its right and left version has a long tradition and is well entrenched by now. Its mobilizing potential was further demonstrated by the violent *Gilets jaunes* protests that started in November 2018 (an ongoing phenomenon that is currently hard to pin down, but that certainly has much to do with socio-economic issues). In a comparative perspective, it is noteworthy that French populism, even within RN, is strongly infused with criticism of neoliberalism, agitation against the rich, and demands for redistribution.

Post-war Germany, in contrast, has a much more recent history of electorally successful populism (if one neglects some regional phenomena). Because of its traumatic history, Germany provided an unfavorable opportunity structure for right-wing populists (Backes 2018). This barrier was overcome only through two exogenous shocks. The Euro crisis in the early 2010s led to the emergence of the neoliberal *Alternative für Deutschland* (AfD) which agitated against Greek bail-outs and monetary union in general. Early regional electoral successes, particularly in the states of the former GDR, were probably facilitated through a union with xenophobic anti-immigration forces who – after the 2015 'refugee crisis' - effectively took over the party and transformed it into a typical populist right-wing organization (with a remaining conflict line between moderates and radicals). Probably because of its roots as a neoliberal 'professor party', socio-economic inequality does not (yet) play a major role in its platform. AfD entered parliament in 2017 with 13 percent of the votes. On the left, *Die Linke* emerged as a protest party against a deregulatory and retrenching reform package implemented by the Social Democrats in the early 2000s. While it is often described as radical left *and* populist, the latter is only true in a rather moderate sense. The 2014 Chapel Hill Expert survey (Polk et al. 2017) only assigns an anti-elite score (0-10) of 5.4 to *Die Linke*, compared to 7.8 for AfD and 9.5 for *Front National*. Full-blown rejection of the established parties is arguably toned-down out of office-seeking considerations, which has led to several government participations on the state level. In 2017, *Die Linke* received just below 10 percent of the votes. Compared

to France, Germany hence has a much weaker salience of populism in its party system. Particularly the combination of populism with radical attacks on inequality are much less established.

The United States, finally, is a case of populism that contrasts with both Germany and France. Its two-party system makes it hard to sustain a populist party. However, the US has a long history of populist mobilization through movements, the media, and third-party candidates that have left their mark on the rhetoric of Democrats and Republicans as well (Bonikowski and Gidron 2016). Prominent contemporary expressions are the *Tea Party* movement within the Republican Party and Donald Trump's entering into office in 2016. Hence, the US is the only case in the sample with a populist government. As both Trump and the *Tea Party* illustrate, populism in the United States tends to be less openly redistributive than in France (although left-wing populism does exist, as illustrated by Bernie Sanders). Socio-economic deprivation is addressed (particularly through linking de-industrialization to free trade), but it is often combined with criticism of state intervention, redistribution to unproductive citizens, and poor management of the economy in general. According to Lowndes (2017: 244), the 'binary of producer and parasite' with strong racial associations is the dominant tradition in US populism (see also Green and White 2019; Lamont et al. 2017).

References

- Backes, U. (2018). The radical right in Germany, Austria, and Switzerland. In J. Rydgren (Ed.), *The Oxford Handbook of the Radical Right* (pp. 452-477). New York: Oxford University Press.
- Bonikowski, B., & Gidron, N. (2016). The populist style in American politics: Presidential campaign discourse, 1952–1996. *Social Forces*, 94(4), 1593-1621.
- Green, M., & White, J. K. (2019). Populism in the United States. In D. Stockemer (Ed.), *Populism Around the World. A Comparative Perspective* (pp. 109-122). Cham: Springer.
- Ivaldi, G. (2019). Populism in France. In D. Stockemer (Ed.), *Populism Around the World. A Comparative Perspective* (pp. 27-47). Cham: Springer.
- Lamont, M., Park, B. Y., & Ayala-Hurtado, E. (2017). Trump's electoral speeches and his appeal to the American white working class. *British Journal of Sociology*, 68(S1), S153-S180.
- Lowndes, J. (2017). Populism in the United States. In C. R. Kaltwasser, P. A. Taggart, P. O. Espejo & P. Ostiguy (Eds.), *The Oxford Handbook of Populism* (pp. 232-247). Oxford: Oxford University Press.
- Mayer, N. (2018). The radical right in France. In J. Rydgren (Ed.), *The Oxford Handbook of the Radical Right* (pp. 433-451). New York: Oxford University Press.
- Polk, J., Rovny, J., Bakker, R., Edwards, E., Hooghe, L., Jolly, S., et al. (2017). Explaining the salience of anti-elitism and reducing political corruption for political parties in Europe with the 2014 Chapel Hill Expert Survey data. *Research & Politics*, 4(1), 1-9.

Appendix B: Additional Tables and Figures

Table B1. Marginal effects of treatment on anger by socio-economic category and country

	FR		DE		US		Pooled ^a
	No controls	With controls ^b	No controls	With controls ^b	No controls	With controls ^b	No controls
Very diff.	10.2**	9.4**	3.0	4.1	3.3	3.4	6.4**
Difficult	9.5**	9.5**	7.5**	7.7**	5.8*	6.6*	8.0**
Coping	10.3**	9.6**	10.9**	10.7***	2.6	3.0	8.2**
Comfort.	8.0	7.4	4.2	4.3	-0.4	-0.1	2.5
Bottom	12.5**	8.7*	9.1	8.5	3.8	4.4	9.6**
2	8.5**	7.7**	7.7**	7.6**	3.6	3.7	6.8**
3	7.7**	9.1**	8.7**	8.9***	0.9	1.9	5.8**
4	9.6*	11.2**	8.9**	9.1**	-2.2	-0.6	5.5**
Top	-	-	0.4	-0.6	0.2	3.2	-0.3
1 st quint.	8.8**	7.3*	9.3**	9.6**	3.2	3.5	7.2**
2 nd quint.	9.1**	8.1*	8.1*	7.4*	6.7*	7.5*	7.9**
3 rd quint.	8.7**	9.4**	10.0**	10.2**	0.5	1.9	7.0**
4 th quint.	13.0**	12.8**	8.7**	8.1*	1.6	1.6	7.1**
5 th quint.	10.6**	9.4**	8.2*	8.5*	-1.1	-0.7	5.9**

Note: * p < 0.05, ** p < 0.01.

^a With country fixed effects.

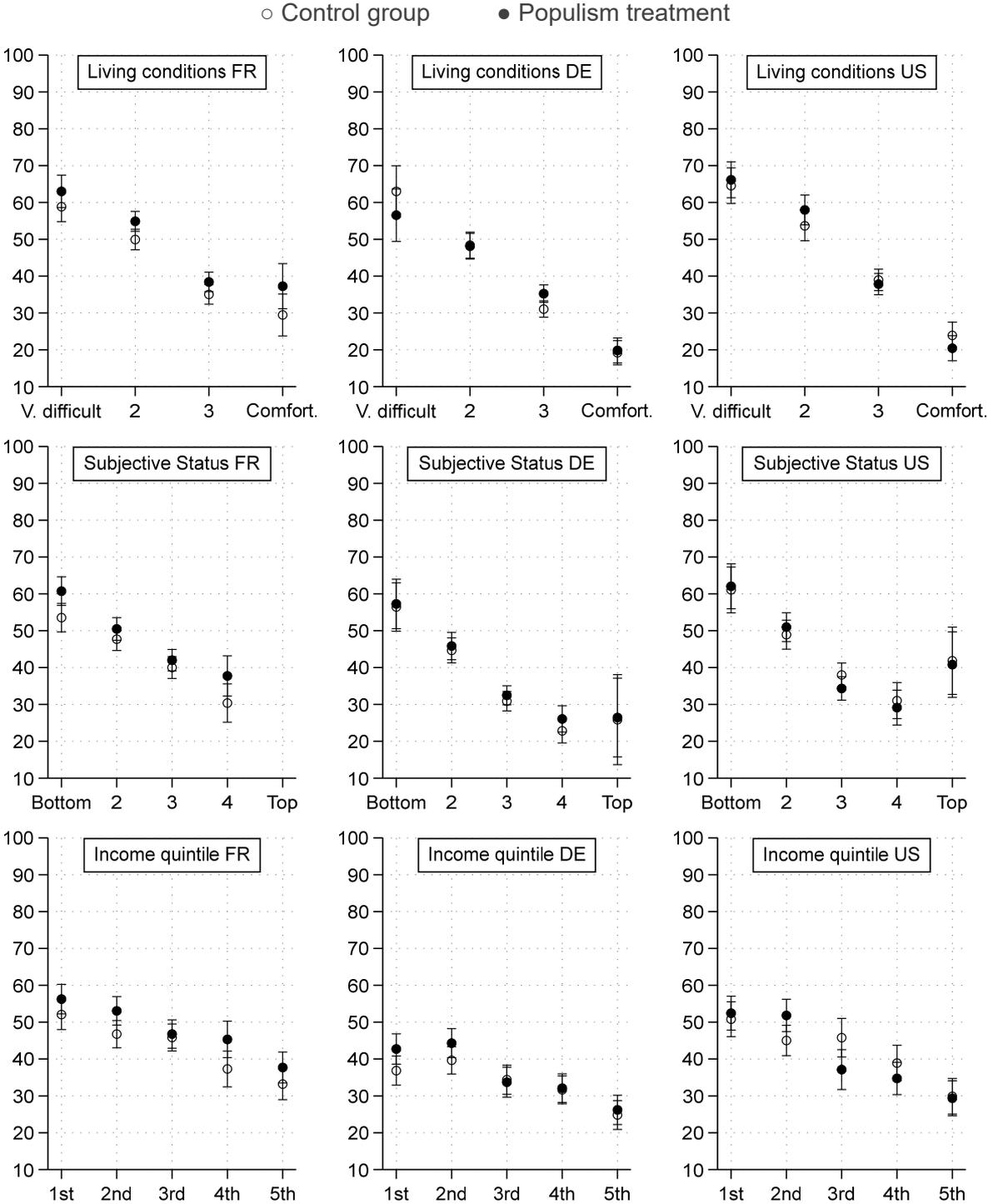
^b Control variables include age, age², gender, university degree, employed, residence in city, left-right scale, political interest, country specific region dummies:

FR: 1) Alsace, Champagne-Ardenne, Lorraine, 2) Aquitaine, Limousin, Poitou-Charentes; 3) Auvergne, Rhone-Alpes; 4) Normandie; 5) Bourgogne, Franche-Comté; 6) Bretagne; 7) Centre; 8) Ile-de-France; 9) Languedoc-Roussillon, Midi-Pyrénées; 10) Nord-Pas-de-Calais, Picardie; 11) Pays de la Loire; 12) Provence-Alpes-Cote d'Azur.

DE: 1) Bremen, Hamburg, Niedersachsen; 2) Nordrhein-Westfalen; 3) Hessen, Rheinland-Pfalz, Saarland; 4) Baden-Württemberg; 5) Bayern; 6) Berlin; 7) Brandenburg, Mecklenburg-Vorpommern; 8) Sachsen, Thüringen.

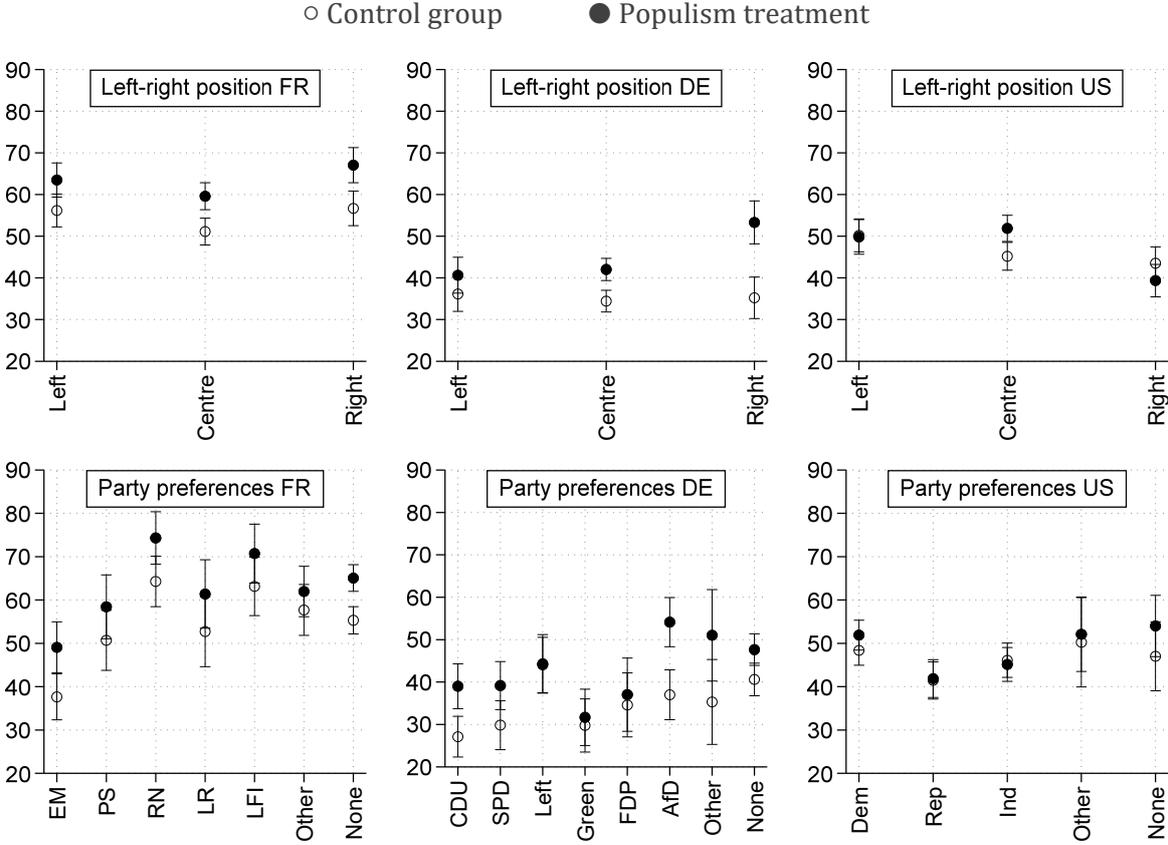
USA: 1) New England; 2) Mid-Atlantic; 3) East North Central; 4) West North Central; 5) South Atlantic (incl. Puerto Rico); 6) East South Central; 7) West South Central; 8) Mountain; 9) Pacific.

Figure B1. Average pocketbook shame by country, socio-economic group and experimental condition with 95% confidence intervals



Note: Category 'Top' in 'Subjective status FR' dropped because of low cases numbers (n=9).

Figure B2. Average pocketbook anger by country, political preference and experimental condition with 95% confidence intervals



Note: Left-right categories recoded from continuous 0-10 scale (Left: 0-3; Centre: 4-6; Right: 7-10). Party preferences refer to a) France: Vote choice in first round of 2017 legislative election; b) Germany: Vote choice in 2017 federal election; c) USA: Party identification.